

PUBLICATION NUMBER : 10241481
PUBLICATION DATE : 11-09-98

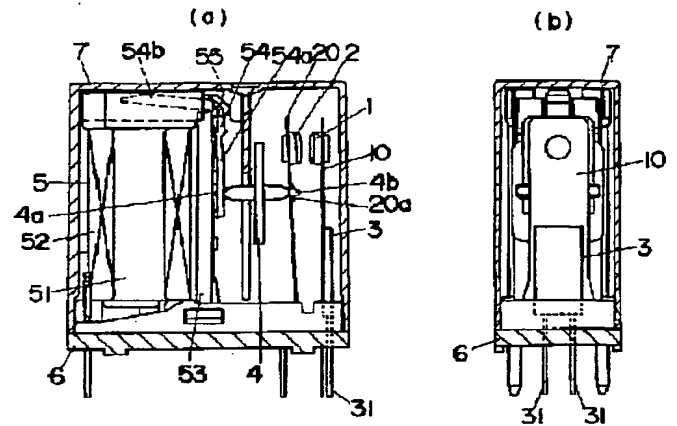
APPLICATION DATE : 21-02-97
APPLICATION NUMBER : 09037883

APPLICANT : MATSUSHITA ELECTRIC WORKS LTD;

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INT.CL. : H01H 1/26 H01H 50/56

TITLE : ELECTROMAGNETIC RELAY



ABSTRACT : PROBLEM TO BE SOLVED: To provide an electromagnetic relay in which the life is extended by deflecting a fixed contact plate in response to an applied voltage from the outside through a piezoelectric element when the deflection amount of the fixed contact plate detected through piezoelectric element becomes smaller than a predetermined value so as to secure the predetermined deflection amount of the fixed contact plate.

SOLUTION: A fixed contact plate 10 and a moving contact plate 20 are respectively formed of conductive plates having a spring property. A fixed contact 1 is provided at the upper end part of the fixed contact plate 10, and a moving contact 2 facing to the fixed contact 1 is provided at the upper end part of the moving contact plate 20. After the moving contact plate 20 is driven toward a fixed contact plate 10 side by a drive member 4 so that the moving contact 2 is brought into contact with the fixed contact 1, the moving contact 2 is thrust toward a fixed contact 1 side by so-called an OT(over travel) amount so that both contacts 1, 2 are brought into contact with a predetermined contact pressure. Since a piezoelectric element 3 set on the fixed contact plate 10 generates a voltage in response to the deflection amount of the fixed contact plate 10, when the OT amount is reduced resulting from the wear of the contact or the like so that the voltage generated by the piezoelectric element 3 is reduced, by applying the voltage to the piezoelectric element 3 from outside, the fixed contact plate 10 is deflected so as to secure the predetermined OT amount.

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